

Application No. 10/752,422
November 5, 2005
Page 2

MXIC-P910320

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A memory cell structure, comprising:
 - a substrate having a first bottom electrode at least partially disposed within the substrate;
 - a pad disposed at least partially over the substrate, the pad comprising a top surface, a bottom surface, and at least two sidewalls disposed between the top and bottom surfaces;
 - a first phase change element disposed at least partially over the substrate and adjacent to the pad, the first phase change element being formed on one of the at least two sidewalls of the pad and being operatively coupled to the first bottom electrode; and
 - a first top electrode operatively coupled to the first phase change element;
 - a second phase change element formed on another one of the at least two sidewalls of the pad; and
 - second top and bottom electrodes operatively coupled to the second phase change element.
- 2-4. Cancelled.
5. (Currently Amended) The memory cell structure as set forth in claim 4-1, wherein the pad is disposed between the first phase change element and the ~~other~~ second phase change element.
6. (Currently Amended) The memory cell structure as set forth in claim 1, wherein:
 - the first bottom electrode is disposed within the substrate;
 - the pad is disposed over and substantially parallel to a top surface of the substrate;
 - the first phase change element is disposed over the substrate; and

Application No. 10/752,422
November 5, 2005
Page 3

MXIC-P910320

the first phase change element contacts both the first bottom electrode and the first top electrode.

7. (Currently Amended) The memory cell structure as set forth in claim 1, wherein the first phase change element has its longest dimension parallel to the substrate.

8-20. Cancelled.